Etelis carbunculus Günther, Catalogue of the Acanthopterygian Fishes, &c., vol. i. p. 79.

D. X. 11. A. III. 8. Scales 50-** (Günther.)

The color is a brilliant red in life, with shining golden lines along each row of scales.

Habitat .- Seychelles and Isle of France (Cuv. et Val., Günther).

ETELIS OCULATUS Gill ex Cuv. et Val.

Serranus oculatus Cuv. et Val. Histoire Naturelle des Poissons, tome ii. p. 266, pl 32. Ramon de la Sagra.

Hesperanthias oculatus, Lowe.

Centropristis oculatus Müller and Troschel.

Macrops (aculeatus) Duméril Ichthyologie Analytique, p. 279. Anthias oculatus Günther. Catalogue of the Acanthopterygian Fishes, &c. vol. ii. p. 92.

D. X. 11. A. III. 8. Scales 50-51-14

Upper half of body rose, lower half straw yellow.

Habitat .- Caribbean sea.

To this species Messrs. Lowet and Günther have referred a representative of this genus found at Maderia, and Temminck and Schlegel‡ auother discovered at Japan. I do not think that it is at all certain that those specimens belong to the present species, and cannot, therefore decisively refer them to the synonymy.

ETELIS CORUSCANS, Val.2

Etelis coruscans Val, Comptes Rendus, tome liv. p. 1166, June 9, 1862.

Body longer, head shorter, teeth smaller, dorsal spines shorter and caudal longer than in E. carbunculus.

Habitat .--- Isle of Bourbon.

After an interval of a third of a century, Valenciennes, again returning to the genus *Etelis*, has added a supposed new species, only distinguished from the E. carbunculus by the comparative characters here cited. He has failed to recognize the affinity of E. oculatus.

Description of a new Genus and Species of PHOLADIDE.

BY GEO. W. TRYON, JR.

Subfamily JOUANNETINÆ, Tryon, 1862.

DIPLOTHYRA, Tyron.

Shell with a double accessory valve; the principal plate placed directly over the umbones, with a smaller anterior one adjoining.

This genus is allied to Martesia; but differs in the double or divided dorsal valve.

1 Serranus oculatus Temm. et Schl. Fauna Japonica, Pisces, p. 5.

¿The Comptes Rendus containing the diagnosis of E. coruscans was received after the transmissioc of the above article to the Academy.

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^{*} Cuvier and Valenciennes assign about sixty scales to the lateral line and seventeen or eighteen rows to the insertion of the ventrals. The former number includes the small caudal scales.

t Hesperanthias oculatus Lowe. Fishes of Maderia. This work is at present inaccessible to me.

D. Smithii, Tryon.



Testâ brevi, ovatâ, in medio obliquê divisâ, anticê acutê striatâ, posticê paulo striatâ vel lævigatâ; laminâ umbonali ovatâ, posticê subtruncatâ, anticê rotundatâ, laminá anteriori parvâ, anticê subacuminatâ.

Shell short, ovate, divided in the middle by an oblique impressed line, posterior to which the surface is covered with growth lines only, but anteriorly it is finely and sharply transversely sculptured, and obsoletcly radiately ribbed in some specimens.

The umbonal plates are generally much distorted, so that no particular form can be traced throughout all the specimens, though the more perfect approach to that depicted in the magnified figure above.

Length .6; height and breadth .4 inch.

Collections of Acad. Nat. Sci., Smithsonian Institution, Sanderson Smith, New York; Hugh Cumming, London; Geo. W. Tryon, Jr.

Habitat.-Tottenville, Staten Island, burrowing in oyster shells.

Mr. Smith, to whom I am indebted for the opportunity of examining numerous individuals of this curious species, gives the following interesting information in relation to them :

"The shells were all dead, and I have found as yet no positive evidence of the oysters being imported ones, although from the great number of southern oysters planted in Prince's Bay and the neighborhood, there is a considerable probability of this. The large number of oyster shells which have been bored from the inside, and consequently after the death of the oyster, suffices to show that the shell is now, or very recently has been living here, as it is hardly likely that so many large dead shells would have been accidentally brought with the living ones. I have hitherto found them only in one lot of thirty or forty loads of shells, of which I cannot ascertain the exact source. They are by no means scarce, and several hundred specimens must have been obtained by mysclf and others."

From the condition of the dried animal matter contained in some of the specimens, I quite agree with Mr. Smith's conjecture that the species is probably still living at the locality mentioned. In many cases where this species has bored from the outside of the oyster shell, penetrating entirely through its ordinary surface, the oyster has protected itself from contact by depositing a layer of nacre between itself and the exposed portion of the intruder.

DACTYLINA (GITOCENTRUM) Chiloensis, King.

To the synonymy of this species must be added Pholas (DACTYLINA) relifer. Mörch. Mal. Blätt. vii. p. 177, Dec. 1860.

Description.—T. elongato-cylindracea fere clausa, antice rotundato subproducta, postice clongata planata læviuscula; costæ 25 parum prominentes longitudinalibus validioribus decussatæ, intersectionibus squamiferis; costæ subæquales, quarta antica parvula; interstitia costarum lirulis planis 4-5; costæ antice et lirulæ intermediæ validiore³, fascie interna excavatæ; lamina dorsalis reflexa unde late umbilicata; cellulæ dorsales ad num. 12 inæquales.

Long 104, alt. 33 mill. Realejo, valva solitaria dextra fractra."

The intermediate flat ribs or lirulæ mentioned above and considered by Mörch to be a distinctive character, are very apparent at the anterior end of most perfect and fresh valves of C h i l o ensis, and they are frequently marked internally by corresponding sulcæ; as the shell grows to maturity these riblets become obsolete, or are replaced by a single intermediate squamiferus small rib.

There is no regularity in the number of radiating costs on the surface, though they do generally average twenty-five in number; but in some valves they become evanescent posteriorly sooner than in others. The dorsal cellules number in different specimens before mc from 12 to 15.

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NATURAL SCIENCES OF PHILADELPHIA.

It will be seen that Mörch describes his species from a single valve, and in the course of his remarks upon its distinctive characters, he refers to the figures of Chiloensis in Philippi Abbild. The examination of a few specimens would have satisfied him of the entire identity of his shell with Chiloensis.

Notes on American Fresh Water SHELLS, with descriptions of two new Species.

BY GEO. W. TYRON, JR.

VIVIPARIDÆ, H. & A. Adams.

VIVIPARA, Montfort, 1810.

The following sub-genera of Vivipara inhabit the United States :

TULOTOMA, Haldeman. Shell heavy and nodulous, opercle corneous and concentric; animal with the habit of Anculosa.

Example. V. magnifica, Conrad. V. bimonilifera, Lea.

MELANTHO, Bowdich, 1822. Shell oval, solid, sub-umbilicate or entirely covered. Whorls smooth, aperture oval. Color uniform.

Examples. V. ponderosa, decisa, etc.

HALDEMANIA, Tryon, 1862. Shell subcarinate, operculum with a paucispiral nucleus, the accretions becoming concentric with age.

Example. V. subcarinata, Say.

There are several species of typical Viviparæ inhabiting our Western waters, all of which are entirely distinct from European species.

V. lineata, Valenc. (sp.)

- Paludina *lineata*. Valenciennes. Rec. d'Obs. de Zool. par Humboldt et Bonpland, ii. p. 255, 1833.—Küster, Martini and Chemn. Conch. Cab. Monog. of Paludina, p. 10, 19, t. 2, f. 6—9; t. 4, f. 4. 1852.
 - " vivipara, Say, in Nicholson's Encyc. 3d. (American) Edit. t. 2, f. 5, 1819. Haldeman, Monog. p. 17, t. 6.

This shell differs from the vivipara of Europe in possessing four spiral red bands, whilst the latter has but three. An examination of hundreds of specimens from various portions of the Western States, and from Europe has convinced me that the difference is permanent.

V. intertexta, Say.

This shell has occasionally, distinct red revolving bands, four in number. I have a number of specimens from Davenport, Iowa, (Prof. Sheldon); and Mr. Binney has one from Rock River, Illinois; they differ from the New Orleans specimens in the umbilicus being more open.

V. subpurpurea, Say.

V. Texana, Tryon.



T. solidâ, conicâ, pallide virente; spirâ elongatâ, suturâ valde impressâ, apice obtusâ; anfractibus senis, paulo-convexis, aperturâ suborbiculatâ, parvâ, 2--5 totius altitudinis æquante. Length 1¹/₅ inch, breadth ³/₄ inch. First five whorls of the spire

equal in length to the aperture.

Hab.-Texas.

Coll. Acad. Nat. Sci. Coll. G. W. Tryon, Jr.

Shell solid, narrowly conic, consisting of six whorls, which are somewhat flattened around their upper portion; sutures well impressed. Aperture suborbicular, equalling 2-5ths of the length

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